

FILE 'HOME' ENTERED AT 09:29:12 ON 09 DEC 2004

FILE 'REGISTRY' ENTERED AT 09:29:21 ON 09 DEC 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 DEC 2004 HIGHEST RN 794053-19-3
DICTIONARY FILE UPDATES: 7 DEC 2004 HIGHEST RN 794053-19-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

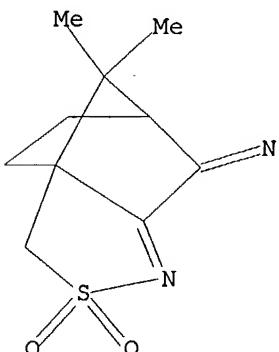
Crossover limits have been increased. See **HELP CROSSOVER** for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=>
Uploading C:\STNEXP4\10612609.str

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 11
SAMPLE SEARCH INITIATED 09:29:38 FILE 'REGISTRY'

SAMPLE SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 1 ANSWERS
SEARCH TIME: 00.00.04

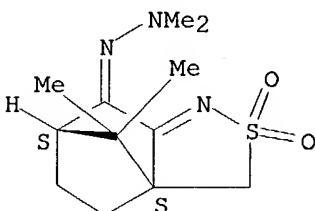
FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 1 TO 80
PROJECTED ANSWERS: 1 TO 80

L2 1 SEA SSS SAM L1

=> d

L2 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 153177-09-4 REGISTRY
CN 3H-3a,6-Methano-2,1-benzisothiazol-7(4H)-one, 5,6-dihydro-8,8-dimethyl-,
dimethylhydrazone, 2,2-dioxide, (3aS)- (9CI) (CA INDEX NAME)
FS STEREOSEARCH
MF C12 H19 N3 O2 S
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT
(Reactant or reagent)
RLD.NP Roles for non-specific derivatives from non-patents: PRP (Properties)

Absolute stereochemistry.
Double bond geometry unknown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 11 ful
FULL SEARCH INITIATED 09:30:25 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 20 TO ITERATE

100.0% PROCESSED 20 ITERATIONS 9 ANSWERS
SEARCH TIME: 00.00.01

L3 9 SEA SSS FUL L1

=> d 13 1-9

L3 ANSWER 1 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
RN 191211-96-8 REGISTRY
CN Copper, di- μ -chlorodichlorobis[(5,6-dihydro-8,8-dimethyl-3H-3a,6-

methano-2,1-benzisothiazol-7(4H)-one-κN1) dimethylhydrazone
2,2-dioxide]di- (9CI) (CA INDEX NAME)

MF C24 H38 C14 Cu2 N6 O4 S2

CI CCS

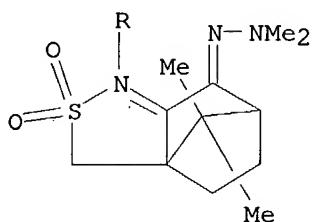
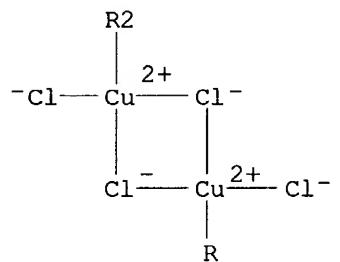
SR CA

LC STN Files: CA, CAPLUS

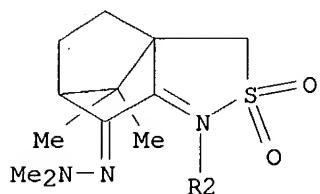
DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

PAGE 1-A



PAGE 2-A



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 179463-12-8 REGISTRY
CN 3H-3a,6-Methano-2,1-benzisothiazol-7(4H)-one, 5,6-dihydro-8,8-dimethyl-,

hydrazone, 2.

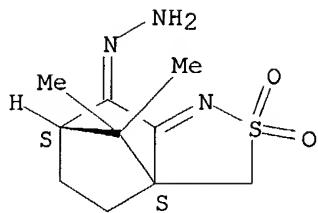
FS STEREOSEARCH

MF C1

LC STN Files: CA, CAPLUS

DT.CA CPlus document type: Journal
DI.NP Data from non-patentee: BBB (Properties); BACT (Reactant or reagent)

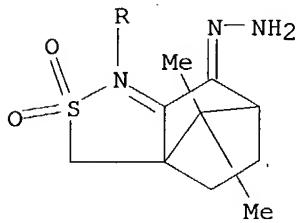
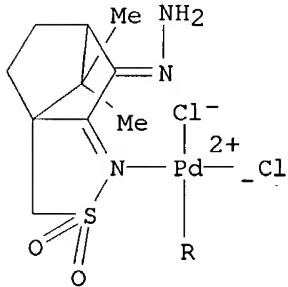
Absolute stereochemistry. Double bond geometry unknown



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 3 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 179168-76-4 REGISTRY
 CN Palladium, dichlorobis(5,6-dihydro-8,8-dimethyl-3H-3a,6-methano-2,1-benzisothiazol-7(4H)-one hydrazone 2,2-dioxide-N1)- (9CI) (CA INDEX NAME)
 MF C20 H30 Cl2 N6 O4 Pd S2
 CI CCS
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA CAplus document type: Journal
 RL.NP Roles from non-patents: PRP (Properties); RACT (Reactant or reagent);
 USES (Uses)



2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 159406-86-7 REGISTRY
 CN 3H-3a,6-Methano-2,1-benzisothiazol-7(4H)-one, 5,6-dihydro-8,8-dimethyl-, hydrazone, 2,2-dioxide, [3aS-(E)]- (9CI) (CA INDEX NAME)
 FS STEREOSEARCH

MF C10 H15 N3 O2 S

SR CA

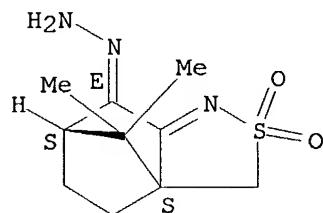
LC STN Files: CA, CAPLUS

DT.CA Cplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 159337-33-4 REGISTRY

CN 3H-3a,6-Methano-2,1-benzisothiazol-7(4H)-one, 5,6-dihydro-8,8-dimethyl-, hydrazone, 2,2-dioxide, [3aS-(Z)]- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C10 H15 N3 O2 S

SR CA

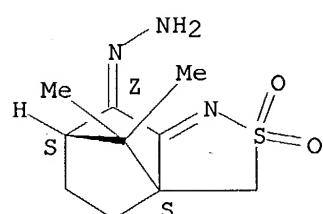
LC STN Files: CA, CAPLUS

DT.CA Cplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

Absolute stereochemistry. Rotation (+).

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 6 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 159337-28-7 REGISTRY

CN Palladium, dichlorobis(5,6-dihydro-8,8-dimethyl-3H-3a,6-methano-2,1-benzisothiazol-7(4H)-one dimethylhydrazone 2,2-dioxide-N1)-, [SP-4-2-[3aS-(E)], [3aS-(E)]]- (9CI) (CA INDEX NAME)

OTHER CA INDEX NAMES:

CN 3H-3a,6-Methano-2,1-benzisothiazole, palladium deriv.

FS STEREOSEARCH
MF C24 H38 Cl2 N6 O4 Pd S2

CI CCS
SR CA

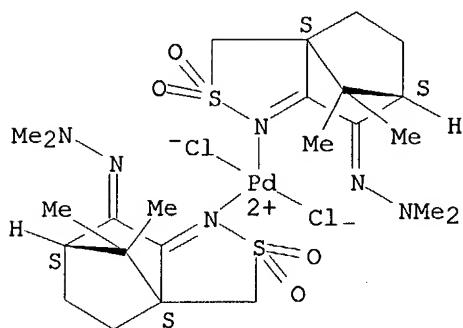
LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)

Absolute stereochemistry.

Double bond geometry as shown.



1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 7 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN

RN 153177-09-4 REGISTRY

CN 3H-3a,6-Methano-2,1-benzisothiazol-7(4H)-one, 5,6-dihydro-8,8-dimethyl-, dimethylhydrazone, 2,2-dioxide, (3aS)- (9CI) (CA INDEX NAME)

FS STEREOSEARCH

MF C12 H19 N3 O2 S

SR CA

LC STN Files: CA, CAPLUS

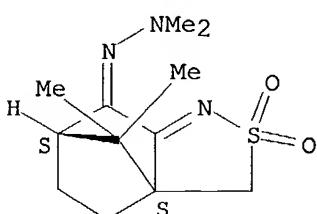
DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)

RLD.NP Roles for non-specific derivatives from non-patents: PRP (Properties)

Absolute stereochemistry.

Double bond geometry unknown.



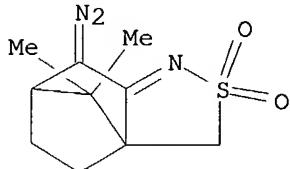
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

3 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA

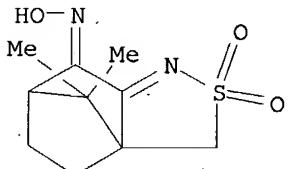
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 8 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 153146-46-4 REGISTRY
 CN 3H-3a,6-Methano-2,1-benzisothiazole, 7-diazo-4,5,6,7-tetrahydro-8,8-dimethyl-, 2,2-dioxide, (3aS)- (9CI) (CA INDEX NAME)
 MF C10 H13 N3 O2 S
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA CAplus document type: Journal
 RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)
 RLD.NP Roles for non-specific derivatives from non-patents: PRP (Properties)



3 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 9 OF 9 REGISTRY COPYRIGHT 2004 ACS on STN
 RN 153146-45-3 REGISTRY
 CN 3H-3a,6-Methano-2,1-benzisothiazol-7(4H)-one, 5,6-dihydro-8,8-dimethyl-, oxime, 2,2-dioxide, (3aS)- (9CI) (CA INDEX NAME)
 MF C10 H14 N2 O3 S
 SR CA
 LC STN Files: CA, CAPLUS
 DT.CA CAplus document type: Journal
 RL.NP Roles from non-patents: PRP (Properties)



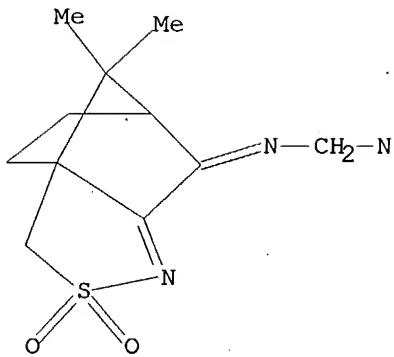
PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=>
 Uploading C:\STNEXP4\0612609.str

L4 STRUCTURE UPLOADED

=> d
 L4 HAS NO ANSWERS
 L4 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 14

SAMPLE SEARCH INITIATED 09:32:01 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L5 0 SEA SSS SAM L4

=> s 14 ful

FULL SEARCH INITIATED 09:32:08 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 13 TO ITERATE

100.0% PROCESSED 13 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L6 0 SEA SSS FUL L4

=>

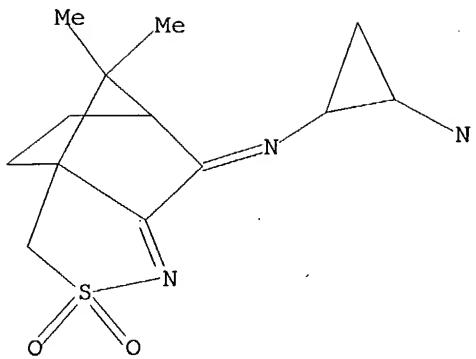
Uploading C:\STNEXP4\612609.str

L7 STRUCTURE UPLOADED

=> d

L7 HAS NO ANSWERS

L7 STR



Structure attributes must be viewed using STN Express query preparation.

=> s 17

SAMPLE SEARCH INITIATED 09:33:32 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED - 0 TO ITERATE

100.0% PROCESSED 0 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**

PROJECTED ITERATIONS: 0 TO 0
PROJECTED ANSWERS: 0 TO 0

L8 0 SEA SSS SAM L7

=> s 17 ful

FULL SEARCH INITIATED 09:33:37 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 1 TO ITERATE

100.0% PROCESSED 1 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

L9 0 SEA SSS FUL L7

FILE 'HOME' ENTERED AT 09:35:52 ON 09 DEC 2004

=> file reg
COST IN U.S. DOLLARS
SINCE FILE ENTRY TOTAL
SESSION
FULL ESTIMATED COST 0.21 0.21

FILE 'REGISTRY' ENTERED AT 09:36:01 ON 09 DEC 2004
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STRUCTURE FILE UPDATES: 7 DEC 2004 HIGHEST RN 794053-19-3
DICTIONARY FILE UPDATES: 7 DEC 2004 HIGHEST RN 794053-19-3

TSCA INFORMATION NOW CURRENT THROUGH MAY 21, 2004

Please note that search-term pricing does apply when conducting SmartSELECT searches.

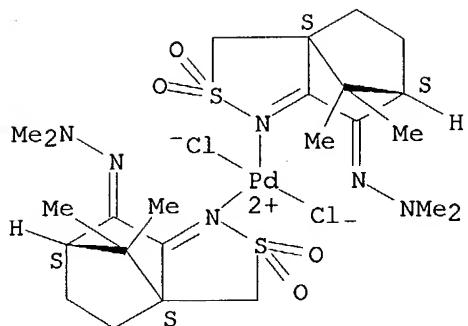
Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at:
<http://www.cas.org/ONLINE/DBSS/registryss.html>

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2004 ACS on STN
RN 159337-28-7 REGISTRY
CN Palladium, dichlorobis(5,6-dihydro-8,8-dimethyl-3H-3a,6-methano-2,1-benzisothiazol-7(4H)-one dimethylhydrazone 2,2-dioxide-N1)-, [SP-4-2-[3aS-(E)], [3aS-(E)]]- (9CI) (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 3H-3a, 6-Methano-2,1-benzisothiazole, palladium deriv.
FS STEREOSEARCH
MF C24 H38 Cl2 N6 O4 Pd S2
CI CCS
SR CA
LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)

Absolute stereochemistry.
Double bond geometry as shown.



1 REFERENCES IN FILE CA (1907 TO DATE)
 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file caplus
 COST IN U.S. DOLLARS
 FULL ESTIMATED COST

SINCE FILE ENTRY	TOTAL SESSION
2.19	2.40

FILE 'CAPLUS' ENTERED AT 09:36:22 ON 09 DEC 2004
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FILE COVERS 1907 - 9 Dec 2004 VOL 141 ISS 24
 FILE LAST UPDATED: 8 Dec 2004 (20041208/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> s 11
 L2 1 L1

=> d

L2 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2004 ACS on STN
 AN 1994:714547 CAPLUS
 DN 121:314547
 TI Synthesis, Structure, and Electrochemistry of Palladium Complexes with Camphor-Derived Chiral Ligands
 AU Carvalho, M. Fernanda N. N.; Costa, Luciana M. G.; Pombeiro, Armando J. L.; Schier, Annette; Scherer, Wolfgang; Harbi, Siamak Khalili; Verfuerth, Uwe; Herrmann, Rudolf
 CS Centro de Quimica Estrutural Complexo 1, Instituto Superior Tecnico, Lisbon, 1096, Port.
 SO Inorganic Chemistry (1994), 33(26), 6270-7

CODEN: INOCAJ; ISSN: 0020-1669

PB American Chemical Society

DT Journal

LA English

LeJanell Please

SEARCH REQUEST FORM

Scientific and Technical Information Center

139995

Requester's Full Name: S. Kumar Examiner #: 69594 Date: 12/9/04
Art Unit: 1621 Phone Number: 2-0640 Serial Number: 10/612609
Mail Box and Bldg/Room Location: _____ Results Format Preferred (circle): PAPER DISK E-MAIL

If more than one search is submitted, please prioritize searches in order of need.

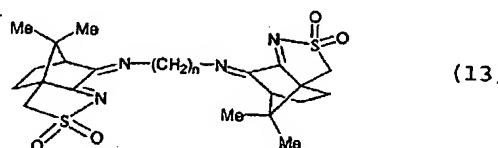
Please provide a detailed statement of the search topic, and describe as specifically as possible the subject matter to be searched. Include the elected species or structures, keywords, synonyms, acronyms, and registry numbers, and combine with the concept or utility of the invention. Define any terms that may have a special meaning. Give examples or relevant citations, authors, etc, if known. Please attach a copy of the cover sheet, pertinent claims, and abstract.

Title of invention: Chiral chelating agent

Inventors (please provide full names): Kwunmin Chen et. al.

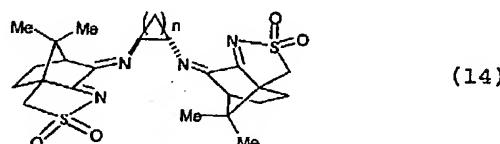
Earliest Priority Filing Date: 2/27/03

13. (original) A chiral chelating agent having a formula (13) as follows and an enantiomeric isomer thereof:



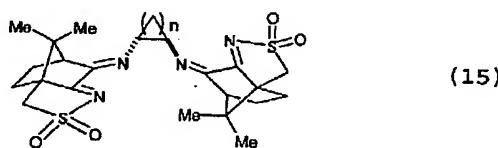
wherein n is an integer between 0 and 4.

14. (original) A chiral chelating agent having a formula (14) as follows and an enantiomeric isomer thereof:



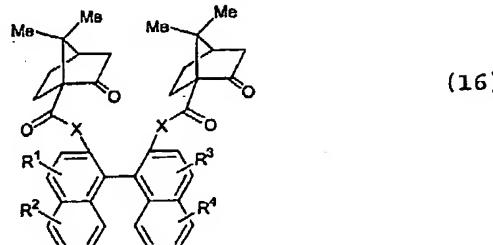
wherein n is an integer between 0 and 4.

15. (original) A chiral chelating agent having a formula (15) as follows and an enantiomeric isomer thereof:



wherein n is an integer between 0 and 4.

diastereomeric or an enantiomeric isomer thereof:



wherein X represents an oxygen atom or a nitrogen atom; R¹, R², R³ and R⁴ represent H, methyl, ethyl, a primary, secondary or tertiary straight, branched or cyclic alkyl group having 3-7 carbon atoms, a heterocyclic or aromatic group, an aromatic group substituted at the 2-, 3- or 4-position,